REMARKS

Claims 1-10 and 12-23 are currently pending, as claim 11 was previously canceled canceled. Claims 1, 14, 17, and 23 are currently amended. No new matter has been added by way of the foregoing amendments. Reconsideration of presently pending claims 1-10 and 12-23 is respectfully requested in light of the above amendments and the following remarks.

Claim Rejections – 35 U.S.C § 101

Claim 23 was rejected under 35 U.S.C. § 101 for being directed to non-statutory subject matter. The Examiner specifically asserted that "Claim 23 is a system which is comprised of software modules (a virtual fab, an inference engine, a user interface, a knowledge collection module and a calculation module), not tangibly embodied on a computer readable medium. Software not tangibly embodied as such as considered printed matter, which is not statutory under 35 U.S.C. 101." Office Action, p. 8.

Applicants submit that amended claim 23 is directed to patentable subject matter. Amended claim 23 recites "a virtual fab that manufactures one or more products for a plurality of clients, wherein the virtual fab comprises a plurality of entities that are communicably coupled via a network, and a database that stores client information, and the virtual fab is configured to: receive integrated circuit manufacturing orders from a plurality of clients; and facilitate access to client information by the plurality of clients and the entities as the entities produce the integrated circuit manufacturing orders." Furthermore, claim 23 is currently amended to recite the following: "a computer program product that includes a computer-readable medium, the medium having stored thereon a sequence of instructions which, when executed by a processor, causes the processor to execute a method, the computer program product comprising: an inference engine communicably coupled to the virtual fab . . . ."

Accordingly, Applicants submit that claim 23 recites statutory subject matter under 35 U.S.C. §101, and respectfully request that the rejection of claim 23 under 35 U.S.C. §101 be withdrawn.

Claim Rejections – 35 U.S.C § 103

Claims 1-23 were rejected under 35 U.S.C. §103(a) as being obvious over Brown, et al. ("A Centralized Approach to Factory Simulation," 1997, Future Fab International, pp.1-9, hereinafter referred to as "Brown"). As noted above, claim 11 was previously canceled. Applicants traverse this rejection on the grounds that Brown is defective in establishing a *prima facie* case of obviousness with respect to claims 1-10 and 12-23.

As the PTO recognizes in MPEP § 2142:

> *... The examiner bears the initial burden of factually supporting*
>
> *any prima facie conclusion of obviousness. If the examiner does*
>
> *not produce a prima facie case, the applicant is under no*
>
> *obligation to submit evidence of nonobviousness...*

In the present application, the Examiner has not established a *prima facie* case of obviousness for the reasons set forth below.

Independent Claims 1 and 17

Independent Claim 1

All words in a claim must be considered

With respect to claim 1, the Examiner alleges that Brown teaches a "virtual fab." For example, the Office Action on page 3 alleges the following: "The applicant [in the response to the Office Action mailed January 5, 2009] relies on the exemplary discussion in the specification as to what a virtual fab entails. However, the examiner notes that the applicant has not invoked lexicography in the specification to set forth a definition as to what a 'virtual fab' is with the required clarity, deliberateness and precision."

A primary tenet of claim construction requires the Examiner to give patent claims "their broadest reasonable interpretation <u>consistent with the specification</u>." MPEP 2111 (emphasis added). The Federal Circuit's en banc decision in *Phillips v. AWH Corp.* expressly recognized that the USPTO employs the "broadest reasonable interpretation" standard:

> The Patent and Trademark Office ("PTO") determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." *In re Am. Acad. of Sci.*

Tech. Ctr., 367 F.3d 1359, 1364[, 70 USPQ2d 1827] (Fed. Cir. 2004). Indeed, the rules of the PTO require that application claims must "conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." 37 CFR 1.75(d)(1).

415 F.3d at 1316, 75 USPQ2d at 1329. Here, Applicants are not trying to persuade the Examiner to import definitions from the specification into the claims in interpreting claim 1, but to require the Examiner to construe the term, *virtual fab*, in light of the specification as it would be interpreted by one of ordinary skill in the art. Applicants submit that the Examiner's construction of the term "virtual fab" to read on the factory simulation models taught by Brown is inconsistent with the specification, because the specification clearly teaches that a "virtual fab" comprises a plurality of entities that are communicably coupled via a network, and a database that stores client information. Further, as taught in the specification, a virtual fab is configured to receive integrated circuit manufacturing orders from a plurality of clients, and facilitate access to client information by the plurality of clients and the entities as the entities produce the integrated circuit manufacturing orders. See at least paragraphs 0038-0039 of the specification. Thus, a virtual fab, as taught by the specification, and as recited in amended claim 1, is not equivalent to the factory simulation models taught by Brown.

Claim 1 is currently amended to clarify the recited "virtual fab." Applicants submit that the cited portions of Brown fail to teach, show, or even suggest "a virtual fab," as currently recited in amended claim 1: "wherein the virtual fab comprises a plurality of entities that are communicably coupled via a network, and a database that stores client information, and the virtual fab is configured to: receive integrated circuit manufacturing orders from a plurality of clients; and facilitate access to client information by the plurality of clients and the entities as the entities produce the integrated circuit manufacturing orders."

The current amendments to claim 1 are supported at least at paragraph 0038-0039 of the specification. Furthermore, Applicants previously noted the differences between a "virtual fab" and the factory simulation engine taught by Brown in Applicants' response to the Office Action mailed January 5, 2009.

The Examiner conceded on page 3 of the Office Action that Brown merely teaches a factory simulation engine: "Brown teaches a simulation engine for simulating what happens in a

factory (Brown is using the factory simulation engine to determine what happens when parameters in the factory simulation are changed before those parameters are done for real in the actual factory), Brown's factory simulation is a 'virtual fab' since Brown's factory is simulated (i.e. is virtual as opposed to real) and is a fabrication facility, i.e., a factory or fab." Office Action, p. 3.

However, the factory simulation engine taught by Brown fails to teach, show, or even suggest, "a virtual fab, wherein the virtual fab comprises a plurality of entities that are communicably coupled via a network, and a database that stores client information, and the virtual fab is configured to: receive integrated circuit manufacturing orders from a plurality of clients; and facilitate access to client information by the plurality of clients and the entities as the entities produce the integrated circuit manufacturing orders," as recited in amended claim 1.

Applicants submit that Brown fails to teach, show, or even suggest a virtual fab as currently recited in amended claim 1. Thus, Brown fails to teach, show, or even suggest a virtual fab, as recited in amended claim 1.

Applicants note that in *KSR Int'l. Co. v. Teleflex Inc., 127 S. Ct. 1727, 1739 (2007)* ("*KSR*"), the United States Supreme Court addressed the issue of obviousness, and explained that:

> "A patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art....it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." *Id.* at 1741 (emphasis added).

In other words, with respect to a given claim, after showing that all of the claim elements are known in the prior art, the examiner must do more. However, as discussed above, Applicants respectfully submits that the Examiner has not met the initial burden of "demonstrating that each element was, independently, known in the prior art."

Accordingly, the Examiner's burden of factually supporting a *prima facie* case of obviousness clearly cannot be met. Therefore, for at least the additional reasons set forth above, it is respectfully submitted that the rejection of claim 1 under 35 U.S.C. § 103 over Brown should also be reconsidered and withdrawn.

Independent Claims 17 and 23

Independent claims 17 and 23 were also rejected under 35 U.S.C. §103(a) as being obvious over Brown. Similar to claim 1, claims 17 and 23 are currently amended to recite "wherein the virtual fab comprises a plurality of entities that are communicably coupled via a network, and a database that stores client information, and the virtual fab is configured to: receive integrated circuit manufacturing orders from a plurality of clients; and facilitate access to client information by the plurality of clients and the entities as the entities produce the integrated circuit manufacturing orders."

The same arguments set forth above with respect to claim 1 apply equally to claims 17 and 23. Thus, the Examiner's burden of factually supporting a *prima facie* case of obviousness clearly cannot be met, and the rejection of independent claims 17 and 23 under 35 U.S.C. §103(a) should be withdrawn.

Dependent Claims 2-10, 12-16 and 18-22

Claims 2-10, 12-16 and 18-22 were also rejected under 35 U.S.C. § 103 as being anticipated by Brown. As discussed above, claim 11 was previously canceled. Each of claims 2-10 and 12-16 depends from and further limits claim 1, and therefore includes at least the elements of claim 1. Further, each of claims 18-22 depend from and further limit claim 17, and therefore includes at least the elements of claim 17. Claims 1 and 17 have been shown above to be non-obvious over Brown as discussed above. Thus, claims 2-10 and 12-16 and 18-22 are also allowable over Brown for at least the same reasons as noted above with respect to claims 1 and 17.

Therefore, at least for the reasons set forth above, it is respectfully submitted that the rejection of claims 2-10 and 12-16 and 18-22 under 35 U.S.C. § 103 over Brown should also be reconsidered and withdrawn.

Conclusion

An early formal notice of allowance of claims 1-10 and 12-23 is requested. The Examiner is invited to telephone the undersigned if further assistance is necessary. Deposit account number 08-1394 can be used for any over payments or under payments.
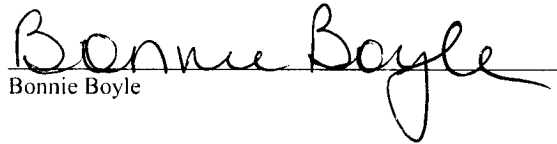
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